services pursuant to Section 271 of the Act at this time. We recommend delaying SWBT's entry until the emergence of effective local exchange competition is safely assured. As long as SWBT possesses significant market power over essential local exchange facilities, its entry into interLATA services will harm the competitive process in both local and long distance services. We believe that the likely consequence of premature SWBT entry will be higher long-run prices, reduced consumer choices, and poorer-quality services for both long distance and local exchange customers. On the one hand, examination of the potential *benefits* of SWBT's entry reveals consumers would gain little, if anything. On the other hand, examination of the potential *costs* of SWBT's entry reveals that consumers are likely to face significantly higher costs of service.

A. Benefits of BOC Entry?

There are three types of benefits which proponents have argued will be realized when BOCs generally are permitted to enter long distance services:

1. Long distance markets will become more competitive.
2. BOCs will be able to capture additional scale and scope economies through vertical integration.
3. The promise of the opportunity to enter long distance services is the "carrot" which will induce the BOCs to cooperate with entrants.

Each of these alleged benefits is illusory. First, long distance markets are already effectively competitive; additional entry, therefore, will not make them meaningfully more competitive. Second, BOC vertical integration is unnecessary to capture such scale and scope economies as may exist when customers can purchase both local and long distance services from a single provider. Third, the "carrot" of long distance entry is effective only as long as the BOC has not been allowed to eat it. It will be necessary to induce the BOC to continue to cooperate with local exchange competitors as long as the BOC possesses significant market power over local services. The question is, again, not *if* a BOC should be allowed to compete in long distance, but *when* the BOC should be permitted.

1. Long distance markets will not become more competitive with SWBT entry.

In Section III, we discussed the considerable evidence that demonstrates the vigorous nature of competition in long distance services. There is already significant excess capacity among just the three largest national facilities-based carriers. Moreover, the existence of a competitive wholesale market for bulk long distance transport means that entry and exit barriers for resellers are quite low. This makes the long distance market competitive (*i.e.*, free entry precludes the earning of more than normal returns by incumbents). Therefore, the addition of one or

even seven new competitors will not meaningfully increase the level of competition. Furthermore, the BOCs would bring no new skills or resources to the market which are not already available in abundance and competing aggressively.

It is conceivable that long distance prices may fall in the short term if the BOCs are permitted to enter long distance services while they continue to maintain access rates vastly in excess of cost or attempt to buy market share by pricing interLATA services below cost. Such a strategy could emerge through cross-subsidization from a BOC's local service business; by integrating into long distance the BOC may strengthen its present dominant position in local services and perhaps establish future dominance over long distance services. Under such a strategy, a BOC might be willing to incur a short-term loss in providing long distance service if such a loss enables it to maintain monopoly control over local services. This opportunity would not exist if the BOCs were not allowed to compete in interLATA services until local service is effectively competitive because this incentive to pursue such a strategy disappears once the BOCs no longer have market power over local services.

Market conditions in long distance services indicate that current prices net of access prices cannot be significantly above long run incremental costs. Therefore a temporary price war which reduces prices below incremental costs in the short run would be anticompetitive and would be likely to harm consumers' interests in

the long run (*e.g.*, because of the adverse effect on incentives to invest or the adverse effect on the competitive process).[70]

2. Entry by SWBT is not required to capture scale and scope economies.

It is also incorrect to argue that vertical integration is required to capture scale and scope economies. First, the sources of these alleged scale and scope economies are not clear. Much of the technical progress which has made it feasible for competition to succeed in long distance markets -- and which promises the opportunity that competition may emerge in local exchange services -- has *reduced* the impact of network-level scale and scope economies. Digitalization, standardization, and modularization have made it feasible to support complex information services across networks which span multiple management and ownership domains. The Internet is a testament to this fact. Before these technical advances, it was much more difficult to manage distributed networks and claims of significant scale and scope economies were harder to dismiss. Today, there may still exist scale and scope economies within either the long distance or the local exchange networks, but it is not clear what network

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[70] This means that it is incorrect to attempt to estimate the effects on consumer well-being based on a static analysis of a hypothetical and short-run price decline in long distance services (as is done by Paul W. MacAvoy, note 30, *supra*) -- without taking into account long-run price trends in long distance *and* local exchange services.

economies require integration of these two networks under control of a single end-to-end firm. Today, most analysts do not believe that end-to-end telephone services are a natural monopoly. Essential local facilities do, however, remain a *de facto* monopoly.

Second, if network scale and scope economies between local and long distance services do exist, then a BOC would have an unfair advantage because of its monopoly control over local network facilities. To guarantee effective competition in long distance services, regulators should continue to require equal access facilities and would need to make sure that the BOC did not exploit its unfair advantage to harm either local or long distance competition until effective local competition emerges.

Third, suppose that scale and scope economies exist, but that they are associated with *marketing* functions rather than with the network. There is ample evidence that many consumers will prefer one-stop shopping with the opportunity to purchase both long distance and local services from a single service provider. By bundling a package of services, a firm can economize on billing and marketing costs and can address customer-specific concerns more flexibly, thereby improving the quality of service. The promise of such opportunities for customer choice is anticipated to be one of the most important benefits delivered by increased competition in local services. However, it is essential that the customer be able to choose among *more than one* end-to-end supplier, and this would not occur with premature interLATA entry. Furthermore, resellers

are able to capture the benefits of any marketing-level scale and scope economies.

3. The promise of the opportunity to enter long distance services ceases to provide incentive for BOC cooperation once entry is permitted.

It is clear that a BOC has little incentive to cooperate willingly with regulatory policies which are intended to reduce its control over local exchange services. Therefore one might be tempted to argue that the BOC must be relieved of the restriction from entering interLATA services in order to provide the BOC with an incentive to cooperate in the emergence of local competition. There are a number of problems with this argument.

First, as we noted earlier, the carrot of interLATA entry ceases to be effective once consumed. Threatening a BOC with the possibility that it could be forced to exit if it behaves in an anticompetitive manner might not be sufficiently effective because regulators or a court may be reluctant to force a BOC to abandon sunk entry investments and it would be very hard to monitor its anticompetitive behavior as the earlier (and subsequent) discussion of its strategic options makes clear.

Second, this argument often implicitly assumes that the Act reflected a "bargain" with the BOCs in which they agreed to give up control of local services in return for something they wanted, namely entry into interLATA services. The Act could not have been a bargain with the BOCs because they had nothing to bring

to the bargaining table. BOCs do not have a property right over local markets to use as a bargaining chip. The Act reflected a shift in regulatory paradigm to a new, market-based mechanism for protecting consumer -- not BOC -- interests.

Finally, we do not believe it would be correct to deny the BOCs the opportunity to compete in interLATA services forever. However, delaying BOC entry until there is effective competition in local markets is neither inefficient nor unfair, but necessary for the realization of the Act's goal of full competition for all telecommunication services.

B. Costs of BOC Entry?

In general, premature BOC entry into interLATA services will incur five types of costs:

1. increasing the likelihood of anticompetitive vertical price squeeze strategies.
2. increasing the likelihood of anticompetitive strategies designed to raise rivals' costs, more generally.
3. increasing the likelihood of anticompetitive behavior based on cross-subsidization of interLATA markets.
4. decreasing the likelihood that the BOC will cooperate with local exchange entrants, as

required by the Act.

5. increasing the costs of regulatory oversight to protect consumers and the competitive process and forestalling the development of local competition.

In each case, the competitive process in both long distance and local exchange markets will be harmed if the BOC is permitted to enter interLATA services while it retains its local monopoly.

1. Increased likelihood of anticompetitive vertical price squeeze strategies

A virtual monopolist who also sells a complementary service (by itself or through its affiliate) can impose a *vertical price squeeze* on a competitor in the complementary product market. This happens because the monopolist controls the price of an input of its competitor in the market for the complementary service. For example, a BOC controls the price of access to the loop by an IXC. If the BOC, or its affiliate, is allowed to provide interexchange services as well, it can continue to price access to its competitors significantly above cost while pricing to itself at cost, and thereby squeeze the profit margin of the IXC. The vertical price squeeze can be pushed all the way up to the point where the IXC's profit margin becomes negative.

Implementation of a vertical price squeeze by a BOC will allow the BOC or its affiliate to charge prices for interexchange

services that are significantly (and artificially) below the prices of its rivals even though the BOC may be a less efficient provider. This is a potent and quick way for a BOC (or its affiliate) to gain market share and customer loyalty for interexchange services.

Presently, the access market is monopolized. In the absence of regulatory intervention, the control of the access market by the BOC results in significant monopoly profits. The existence of high profit margins allows for the possibility of the implementation of the vertical price squeeze. As the Telecommunications Act of 1996 is implemented by the state commissions and as new facilities-based competitors enter the local exchange market, the market for access services, unbundled network elements, and local exchange services should become more competitive. Such competition will render a vertical price squeeze less effective. Thus, the present time is the opportune moment -- from the point of view of the BOC -- to impose a vertical price squeeze and gain significant market share in the IXC market.

2. Increased likelihood of anticompetitive strategies designed to raise rivals' costs, more generally

A BOC will also be able to exercise market power by bundling services and making it more difficult for customers who subscribe to more than one service to switch carriers. Such bundling schemes will be much more effective for a firm with near monopoly market power in one portion of the bundle, here in the

provision of local service. If a firm has significant market power, its competitors will have, even in the absence of bundling by the dominant firm, a difficult time attracting customers. A BOC's position as the entrenched monopoly provider will make it difficult for other firms to convince customers to switch carriers. If the BOC sells to customers bundles of local and toll services, the willingness of customers to switch will be that much less and the BOC's operation, as a whole, will be able effectively to lock in a significant portion of its customer base.

We stressed earlier the importance of both price and nonprice anticompetitive strategies available to the BOC. Forward integration by the BOC into long distance services would increase the span of potential markets, services and products which could provide a basis for anticompetitive strategies. This integration would expand the range of opportunities to engage in those strategies, would make it more difficult to detect or deter such behavior, and would increase incentives and opportunities to fund such behavior. For example, entry into unregulated long distance services would increase incentives to cross-subsidize and to engage in other anticompetitive strategies to evade continuing local service regulations.

3. Increased likelihood of anticompetitive behavior based on cross-subsidization of interLATA markets

The BOC can easily cross-subsidize its long distance

operation (or its long distance affiliate) by not requiring its long distance affiliate to pay the full cost of the inputs it uses. For example, the long distance operation of the BOC will use the brand name of the BOC, one of its most important assets, without payment -- clearly cross-subsidization. Further, it is not clear how the costs will be divided in the joint marketing of the long distance and the local operations, raising the possibility of additional opportunities for cross-subsidization.

4. Decreased likelihood that the BOC will cooperate with local exchange entrants, as required by the Act

Entry by a BOC into interLATA services results in a fundamental change in the BOC's incentives to discriminate among long distance carriers. When the BOC is restricted to offering local services, the BOC has no incentive to favor one long distance carrier over another. Because local access and long distance are complements (*i.e.*, a local loop is required to complete a long distance call), the BOC has an incentive to encourage as much long distance competition as possible. Competition in long distance drives down toll charges, stimulating demand for long distance services. In turn, BOC revenues increase both because of increases in access revenue -- which significantly exceeds the incremental cost associated with the traffic -- and because consumers who pay less for long distance service are likely to be willing to spend more on local services.

Once a BOC is also a long distance carrier, it has a strong incentive to discriminate in favor of its own long distance business. Before entry, local and long distance are complements; after entry, the BOC and other long distance carriers are competitors, and thus the BOC will lack the necessary incentive to provide services to the interexchange carriers, which the latter require in order to compete with the BOC both as a competing local exchange carrier and as a long distance carrier.

5. Increased costs of regulatory oversight to protect consumers and the competitive process and delaying the development of local competition

The most important social cost of premature BOC entry into interLATA services is likely to be the forestalling of the emergence of effective local competition. Implementing the pro-competitive policies of the Act is quite difficult and is likely to require substantial regulatory oversight as long as the BOCs retain significant monopoly power over essential facilities. It is important to understand that the difficulties of introducing competition into local exchange markets are likely to be significantly greater than it was to introduce competition in long distance, which explains the need for more stringent regulatory requirements such as the unbundling and total service resale provisions of Section 251.

Introducing local service competition is more difficult for at least five reasons. First, the capital investment per

customer is much larger for local services than for long distance. In 1995, the investment-per-subscriber line was $1,828 for local services compared to $255 for that for AT&T -- a more than sevenfold difference.[71] This means that the BOC is likely to retain its role as the monopoly provider of facilities in many local markets for a number of years.

Second, entry into local services requires competitors to cooperate much more extensively than was necessary in long distance markets. In local services, entrants will need to purchase essential UNEs, wholesale, and interconnection services from a competitor. During the early days of long distance competition, competitors needed to both interconnect with AT&T and lease wholesale transport facilities, but this dependence was never as great and did not last as long as the CLECs' dependence on the BOC. In the long distance context, the option to build long distance transport bypass facilities offered more effective discipline than the analogous option of local bypass in local exchange markets.

Third, the technology of local exchange competition means that providers have less flexibility in where they locate facilities than does a long distance carrier. To provide local

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[71] See *Statistics of Communications Common Carriers 1995/1996, Federal Communications Commission*, November 27, 1996. Local exchange plant in service was $278.946 billion (Table 2.7) and there were 152.601 million subscriber lines (Table 2.3); AT&T's total plant in service was $25.894 billion (AT&T financial data maintained in conformance with regulatory requirements) and there were 101.357 million subscriber lines (Table 8.12).

loop service, a carrier needs loops that go to each house. To provide long distance service, a carrier can locate its point of presence much more flexibly; its only constraint is that it sits within the LATA. This is also true for the location of switches and long-haul transport facilities. This added flexibility in the interLATA arena lowers the costs of constructing facilities and increases opportunities for competition among facilities over a wider geographical range.

Fourth, with SWBT precluded from interLATA services, and consequently interested in promoting increased competition, regulators and the BOC's interests regarding the promotion of long distance competition are aligned. This alignment of interests eased the burden on regulators immediately following divestiture when effective competition was emerging because SWBT is likely to have much better information about underlying costs and demand than is available to the typical regulatory agency. No alignment of interests exist with respect to local markets.

Fifth, the local services provided by the BOC are an essential input to a wider class of products and services than is long distance and so there are a greater array of monopoly leveraging opportunities, giving the BOC a greater incentive to preserve its local monopoly.

Elimination of one form of simple regulation (*i.e.*, the interLATA entry restriction) would create increased incentives and opportunities for anticompetitive strategies which would be harder

both to detect and to deter. Therefore premature entry by a BOC into interLATA services would increase the overall regulatory burden on state commissions and the FCC, which already face a significant regulatory challenge promoting local service competition.

V. RESPONSE TO THE CLAIMS OF ALFRED KAHN AND TIMOTHY TARDIFF, RICHARD SCHMALENSEE, AND MICHAEL RAIMONDI

In this section we demonstrate that SWBT affiants Kahn and Tardiff, Schmalensee, and Raimondi present misleading and logically inconsistent arguments in support of their principal conclusion that it is in the public interest to permit SWBT entry into interLATA services at this time. Using faulty data, they argue that long distance prices are excessive and contend that permitting entry by SWBT is the *only* way to introduce effective competition into interLATA services, while denying the existence of any threat to the competitive process. These erroneous arguments are based on a mischaracterization of economic theory and a selective presentation of partial or incorrect data, as we demonstrate below. Specifically, we show the following:

1. Key arguments of SWBT affiants are logically inconsistent.
2. Basic economic theory suggests greater benefits from increased local competition, but not from additional entry into long distance markets.

3. Arguments regarding prices and narrow targeting of discount programs in long distance markets are misleading and incorrect.

4. Assertions that long distance margins are higher and that entry will result in substantial long term reductions in average long distance prices are based on an overstatement of prices and an understatement of costs.

5. Experience of SNET and GTE demonstrates advantages of "one-stop" shopping and the danger of allowing premature entry by a dominant LEC into interLATA services.

6. SWBT is unique in being able to offer effective long distance competition.

7. Threat of anticompetitive behavior by SWBT is real and supported by economic theory.

8. Estimates of significant gains from interLATA entry by SWBT are over-stated and based on erroneous assumptions.

A. Arguments of SWBT Experts Are Logically Inconsistent

The basic arguments of SWBT experts are logically inconsistent. First, they argue that long distance pricing is not competitive, while regulation precludes (and, under the protective provisions of the Act, will continue to preclude) the exercise of

any market power over local services. If regulation is so effective, one wonders why it has not been effective in deterring anticompetitive behavior in long distance markets, in which we have over a decade of regulatory experience managing the emergence of effective competition. The answer is, of course, that regulation is imperfect and only partially restrains the incumbent monopolist. The Telecommunications Act of 1996 in calling for a new regulatory paradigm relies on the generally accepted premise that effective competition provides a better mechanism (*i.e.*, lower cost, enhanced incentives, and greater effectiveness) for assuring desirable market outcomes (*i.e.*, lower costs, lower prices, and improved customer choice) than does direct regulatory oversight. Section 271 of the Act anticipates the danger to the competitive process in all telecommunications markets of allowing a BOC to enter in-region, interLATA services prematurely, before the emergence of effective competition which will demonstrate that the pro-competitive provisions of Section 251 have been successfully implemented.

Second, arguments of high long distance margins are inconsistent with the empirical evidence of low entry barriers (*e.g.*, the history of robust entry) and with profit-maximizing behavior by all of the other potential entrants to the market. If excessive profits are being earned in long distance, then why does additional entry (including by the RBOCs outside their regions) not occur? The answer is that long distance firms are not earning

excess profits because prices approximate economic costs. The restriction against participating in in-region, interLATA services in Oklahoma applies *only* to SWBT. SWBT is unique in only one respect: It is the incumbent monopolist supplier of essential bottleneck facilities. SWBT is not unique in being the only firm with the firm-specific skills and financial power to enter interLATA services. Potential entrants include all of the other RBOCs, cable television companies, and all of the firms which Kahn and Tardiff cite as evidence that local competition is (at least potentially) vigorous.

B. Economic Theory Suggests Greater Benefits from Increased Local Competition, Not Additional Entry into Long Distance Markets.

Six economic features of local exchange and long distance markets highlight the likelihood of market power in local exchange and competition in long distance. First, local service is an essential input to the production of long distance service (that is, the price of access is a cost of providing long distance). Second, local service demand is relatively price-inelastic, while long distance demand is more elastic.[72] Hence, with market power,

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[72] Estimates of the price elasticity of long distance demand range from around -0.5 to -0.75, while the price elasticity demand for local services is much closer to zero. See, *e.g.*, Lester Taylor, *Telecommunications Demand in Theory and Practice*, Boston: Kluwer Academic Publishers, 1994; and Simran Kahai, David Kaserman, and John Mayo, note 21, *supra*.

local exchange markups over cost are likely to be much higher than for long distance, suggesting larger potential price declines for local exchange.[73] Third, local markets are geographically much smaller than long distance (with loops to specific residences and businesses, as opposed to transport between city pairs). Therefore, while one may meaningfully speak of a national long distance market, local services in a state are comprised of many essentially separate local markets (*e.g.*, potentially, each wire center could be regarded as a separate local market because subscribers in that wire-center cannot choose among alternative sources of supply). Fourth, as we noted earlier, local service is much more capital-intensive, representing a potential barrier to entry into local markets. Fifth, monopoly-supplied inputs are necessary to provide local service. In local service, SWBT's network is needed for call origination and termination, switching, and transport; the cooperation of a competitor (SWBT) is required for an entrant's success. In contrast, in long distance, there is equal access (for call origination and termination) and competitive bulk-supply for transport and switching. Sixth, resale mechanisms are different in local and long distance markets. Long distance resale more closely resembles the unbundled network element

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[73] Traditional price regulation seeks to restrain monopoly pricing, but such regulation is imperfect, in part, because the carrier possesses superior information regarding the nature of costs and demand.

mechanism of the Telecommunications Act of 1996 than local resale; unbundling of local network elements is not yet a commercial reality.

These industry and market characteristics strongly suggest that long distance markets are more competitive than local exchange markets. This suggestion is borne out by differences in price changes in the two markets, as we discuss further below.

C. Evidence of Rising Price Trends and Narrow Targeting of Discount Programs in Long Distance is Misleading and Incorrect.

As we observed in section III, switched interstate toll prices fell by about 62 percent in real terms from 1984 to 1996, or by 37 percent net of access. These price reductions were shared across services and by all classes of customers. As we explained, a narrow focus on MTS tariffs is inappropriate because such tariffs are not necessarily considered by customers when making their purchasing decisions, as demonstrated first by their actual behavior (as reflected in ARPM trends), and because of the way in which telecommunications services are actually marketed (promotional materials and advertisements do not reproduce tariff pages).

Kahn and Tardiff's contrary conclusion is based on a comparison of the decline in the Consumer Price Index (CPI) for interstate long distance services and the decline in access

charges.[74] Their analysis is flawed because the CPI index fails to adequately reflect the effects of discount programs.

D. Assertions that Long Distance Margins are High and that Entry Will Result in Substantial Long Term Reductions in Average Long Distance Prices are Based on an Overstatement of Prices and an Understatement of Costs.

Kahn and Tardiff[75] and Gordon[76] present a simplified analysis of long distance price-cost margins in order to demonstrate that long distance prices are excessive. Kahn and Tardiff based their analysis on an AT&T filing which reported ARPM of $0.18 in 1994, access charges of $0.06 per minute, and incremental toll costs of $0.01-$0.02 per minute. They use this data to claim that long distance margins are a dime, compared to

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[74] See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 7.

[75] Although Kahn and Tardiff never explicitly state that long distance pricing by AT&T or anyone else is inconsistent with competition, they argue that the margins in long distance are twice the margins earned in local services: "AT&T marks up long distance prices over incremental costs by a dime." (see *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 9). It is interesting to note that they choose to critique arguments by AT&T economists rather than explicitly expressing their own opinions regarding the pricing behavior of either local or long distance companies.

[76] See *Affidavit of Kenneth Gordon*, note 4, *supra*, footnote 16.

the mark-up of access charges over LEC costs of a nickel.[77] This analysis significantly overstates long distance margins.

First, the revenue and cost estimates correspond to different points in time. During 1994, access charges were $0.07 per conversation minute, and fell to $0.06 per conversation minute only in the second half of 1995. Second, under AT&T's One Rate plan today, no consumer need pay more than $0.15 per minute, and may be able to pay significantly less by taking advantage of discount programs.

Third, the estimate by Kahn and Tardiff of non-access incremental costs fails to account for all of the incremental costs which must recovered. Their estimate of $0.01-$0.02 in incremental network costs does not include uncollectibles,[78] sales and marketing, and overhead costs. Variable marketing costs would include customer-acquisition costs, customer service, billing and maintenance costs. In addition, not all overhead costs are fixed. A proper estimate of incremental costs needs to account for all firm costs which increase when the firm expands output, not just those costs associated with operating the network.

One way to gain insight into the magnitude of these costs

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[77] See *Affidavit of Alfred E. Kahn and Timothy J. Tardiff*, note 5, *supra*, page 9.

[78] Uncollectibles or bad debt are often treated as an offset to revenues; however, in the present context it is more appropriate to regard these as a variable cost of doing business.

is to examine AT&T's income statements in recent years. Non-network, non-access costs have increased as a share of revenues since 1988 from 25 percent to 32 percent in 1994 -- remaining approximately constant at $0.04 to $0.06 per minute, depending on whether you include corporate operations.[79] This is not surprising because competition imposes increased pressure to improve service quality, while at the same time forcing firms to eliminate cost inefficiencies. Moreover, these cost estimates reflect the significant scale and scope economies realized by a national competitor like AT&T.

Updating the computation of Kahn and Tardiff to reflect current pricing and more realistic costs yields an estimated average margin ranging from $0.01-$0.03, depending on whether one includes corporate operations and whether one uses $0.01 or $0.02 as the estimate of incremental network costs. From these margins, long distance carriers must recover any fixed costs not included in the above estimates, pay taxes, and earn a fair return on invested capital. While these calculations are not precise[80], they are

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[79] Uncollectibles, customer operations, and corporate operations comprised 24.8 percent of switched long distance revenues in 1988 and 32.0 percent in 1994 for AT&T (see Figure 7). Corporate operations includes those costs which are normally referred to as overhead costs, or more loosely, as "common costs."

[80] For example, AT&T earns revenue from international calling and operator services which raise ARPM above the $0.15 per minute implied by the One Rate plan. Also, not all consumers take advantage of the One Rate plan while other consumers pay (continued...)

adequate to refute any claim of excess returns being earned by long distance carriers.

The SWBT's brief's reliance upon the price-cost margin calculations of Professor Paul MacAvoy is equally unfounded. See SWBT Br. at 59-61. First, because MacAvoy has repeatedly chosen not to make his data available, it is difficult, if not impossible, to replicate his work. Even without the data, however, it is clear that his price-cost margin calculations are erroneous. As we demonstrated at length in our 1994 Declaration,[81] MacAvoy systematically overstates long-distance prices and understates costs. By relying on tariff data, MacAvoy simply ignores the effect of discounting and promotional programs. Thus, his putative "price" calculations are entirely divorced from prices consumers actually pay.[82] With respect to costs, Macavoy underestimates access charges, and like Kahn and Tardiff, he fails to account adequately for a host of incremental costs such as uncollectibles,

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[80] (...continued)
significantly less than $0.15 per minute. Furthermore, the estimate of incremental costs depends on the horizon over which one is examining margins. In the long run, all costs are variable and should be included in an estimate of long run incremental costs.

[81] See *Declaration of R. Glenn Hubbard and William H. Lehr*, note 18, *supra*, pages 17-28; see also *B. Douglas Bernheim and Robert D. Willig*, note 18, *supra*, Chapter 2, pages 75-90.

[82] See *Declaration of R. Glenn Hubbard and William H. Lehr*, note 18, *supra*, pages 17-22; see also *infra* at 24.

sales and marketing, and overhead.[83]

Rejection of the claim of excess margins is the same as demonstrating that prices approximate economic costs. If this is the case, then additional entry by SWBT or any other firm will not result in significant reductions in average long-run prices for toll services.

In contrast, many local services such as carrier access, business service, and vertical features are priced significantly above economic costs.[84] Therefore, competitive entry into local services is likely to produce substantial benefits by driving prices closer to economic costs and by forcing the incumbent LEC to become more efficient.

E. Experience of SNET and GTE Demonstrates the Importance of One-Stop Shopping and the Danger of Allowing Premature Entry by a Dominant LEC into interLATA Services.

In support of their contention that BOC entry will

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[83] See *Declaration of R. Glenn Hubbard and William H. Lehr*, note 18, *supra*, pages 21-28; see also *B. Douglas Bernheim and Robert D. Willig*, note 18, *supra*, Chapter 2, pages 81-84.

[84] While it is generally agreed that many services such as carrier access, business services, and vertical features are priced significantly above incremental costs, the LECs argue that above-cost prices for certain services are necessary to subsidize local residential service which is provided below cost. However, these claims are typically based on an incomplete comparison of the rate for flat rate residential service and the total element long run incremental cost (TELRIC). Moreover, LEC estimates of TELRIC are usually constructed so that TELRIC approximates the LEC's actual, embedded costs -- implying that the LECs are already efficient.